What is claimed is:

1. A method of preventing rouge in water which comprises:

a. providing a source of water which is substantially free of carbon dioxide;

b. distilling said water in an environment which is substantially free of carbon dioxide; and

c. storing said distilled water in an environment which is substantially free of carbon dioxide.

2. The method of claim 1 wherein the environment which is substantially free of carbon dioxide is an inert gas, nitrogen, oxygen or a mixture thereof.

3. The method of claim 1 wherein the distilling step and the storing step occur in the same environment which is substantially free of carbon dioxide.

4. A rouge free pharmaceutical water for injection purification system comprising:

a. a water intake;

b. a multi-effect still connected to said water intake, wherein said multi-effect still contains an internal controlled atmosphere which is substantially free of carbon dioxide;

c. a connector for the passage of water from the multi-effect still to a water for injection storage tank; and

d. a controlled atmosphere blanketing the water in the storage tank, wherein said controlled atmosphere is substantially free of carbon dioxide.

5. The rouge free water for injection purification system of claim 4, further comprising a closed loop with a heat exchanger attached to the storage tank, wherein

the water is circulated through the heat exchanger to maintain the water at a desired temperature.

6. The rouge free water for injection purification system of claim 4 or 5, which is constructed out of stainless steel.

7. The rouge free water for injection purification system of claim 6, wherein the stainless steel is 316 stainless steel.

8. A rouge free pharmaceutical water for injection purification system comprising:

(a) a water intake;

(b) a first deaerator;

(c) a first input to said first deaerator, wherein said first input receives a supply of a carbon dioxide free controlled atmosphere for the first deaerator;

(d) a first connector connecting the first deaerator to a heat exchanger;

(e) a second connector connecting the heat exchanger to a vapor compression still;

(f) a third connector connecting the vapor compressions still to the heat exchanger;

(g) a fourth connector connecting the heat exchanger to a second deaerator;

(h) a second input into said second deaerator, wherein said second input receives a supply of a carbon dioxide free controlled atmosphere for said second deaerator;

(i) a fifth connector which connects the second deaerator to a water for injection storage tank; and

(j) a water for injection storage tank input, wherein said water for injection storage tank input receives a supply of carbon dioxide free controlled atmosphere for the water for injection storage tank.

9. The rouge free water for injection purification system of claim 8, further comprising a closed loop with a heat exchanger attached to the storage tank, wherein the water is circulated through the heat exchanger to maintain the water at a desired temperature.

10. The rouge free water for injection purification system of Claim 8 or 9, which is constructed out of stainless steel.

11. The rouge free water for injection purification system of claim 10, wherein the stainless steel is 316 stainless steel.